

[54] ELECTROSURGICAL INSTRUMENTS

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200/159 B; 200/302.1[58] Field of Search 128/303.13, 303.14,
128/303.17; 200/159 B, 302 A

[56] References Cited

U.S. PATENT DOCUMENTS

3,092,430	6/1963	Miller	339/32
3,648,001	3/1972	Anderson et al.	128/303.14 X
3,799,168	3/1974	Peters	128/303.14
3,801,766	4/1974	Morrison, Jr.	128/303.14
3,807,404	4/1974	Weissman	128/303.14
4,021,630	5/1977	Taylor	200/159 B
4,032,738	6/1977	Esty et al.	128/303.13 X
4,034,761	7/1977	Prater et al.	128/303.14
4,112,950	9/1978	Pike	128/303.14
4,170,234	10/1979	Graham	128/303.14

FOREIGN PATENT DOCUMENTS

783141	4/1968	Canada	200/302 A
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[57]

ABSTRACT

An electrosurgical instrument for providing an interface between an electrosurgical electrode and an electrosurgical generator and for selectively providing electrical energy to the electrode for cutting, coagulation and the like, is provided. A hollow handle removably supports an electrode in one end and receives a three wire cable through an opening in its other end. The wires of the cable are supported and positioned on a substantially flat insert which has three flat-headed contact pins forced therein to penetrate the outer insulation of the wires and establish electrical contact with the wires. A conductor plate overlies the insert and is equipped with four conductor strips for contacting the electrode and the three contact pins, respectively. Switch buttons have stems that extend through apertures in the wall of the handle for selectively activating the conductor strips. Snap dome springs between the stems and the conductor strips provide tactile and audible sensations for the operator, and protuberances on the upper surfaces of the conductor strips prevent the domes from inverting while they apply sufficient force to the conductor strips. The proximal end of the cable is secured to a connector having a base and cover providing a housing for the three wires. Contact pins provide electrical communication between the wires and three spring contacts having generally rounded contact ends.

1 Claim, 7 Drawing Figures

